

Appendix 1 - Planting rates for drill or broadcast seeding and sprigging in Texas, Zone 1

Name	Variety	Seeding rates are pounds pure live seed (PLS) per acre 3/, 6/, 10/	Native (N) or Introduced (I)	Season of growth	Adaptation by Major Land Resource Areas										Seeding Guidance Maximum Seeding Dates 7/, 8/	Adapted Plants by Soil Groups 9/					Comments
					Upper Canadian Breaks (70B)	High Plains North (77A)	High Plains, Northwest (77B)	Southern High Plains (77C)	High Plains Southwest (77D)	High Plains, Southwest (77E)	Canadian River Breaks (77F)	Rolling Plains, West (78B)	Rolling Plains East (78C)	Coarse		Moderately Coarse	Medium	Moderately Fine	Fine		
PERENNIAL GRASSES																					
1/, 4/																					
Bermudagrass: hulled	common	2.3	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X				
Bermudagrass: unhulled	common	3.0	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X				
Bermudagrass: Sprigged	African star, Alicia, Brazos, Callie, Coastal, Coast-Cross I, Jiggs, Guymon, Grazer, Midland, Selection 3, Sheffield, Tifton 44, Tifton 68, Tifton 78, Tifton 85, World Feeder	12 bu 2/	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X		Cover depth is one to three inches.	
Bluestem: big	Earl, Kaw, local harvest	6.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X		Use only when adequate moisture conditions exist.	
Bluestem: cane, silver		1.2	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X			
Bluestem: little	Cimmaron, Pastura, native mix	3.4	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X		Use only when adequate moisture conditions exist.	
Bluestem: sand	Elida, Woodward	6.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X				
Bluestem, yellow	Angleton, Australian, Caucasian, Gordo, King Ranch, Kleberg, Medio, Pretoria-90, T-587, WW-B Dahl	1.2	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X	Use on sandy clay loam soils only when a sandy clay loam layer is present within 8 to 12 inches of the soil surface.	
Bluestem, yellow	Ganada, Plains, Ironmaster, WW-Spar	1.8	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X		
Bristlegrass: plains 5/		3.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X			
Bromegrass: smooth		10.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	Irrigated or Subirrigated Sites	
Buffalograss: burs	Texoka	8.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X	Cover depth is 1/4 to 1/2 inches.	
Buffalograss: dehulled		3.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1			X	X	X	Cover depth is 1/4 to 1/2 inches.	
Cottontop: arizona		1.2	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X		
Dropseed: giant		1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X				
Dropseed: mesa		1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X				
Dropseed: sand		1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X			
Dropseed: sand		1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X			
Dropseed: spike		1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X				
Dropseed: tall		1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X		
Eastern gamagrass	Iuka, Iuka IV, Pete, San Marcos germplasm, Texas Sue	10.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X		Cover depth is 1/2 to 3/4 inches. Irrigated Only	

Appendix 1 - Planting rates for drill or broadcast seeding and sprigging in Texas, Zone 1

Name	Variety	Seeding rates are pounds pure live seed (PLS) per acre 3/, 6/, 9/	Native (N) or Introduced (I)	Season of growth	Adaptation by Major Land Resource Areas										Seeding Guidance Maximum Seeding Dates 7/, 8/	Adapted Plants by Soil Groups 10/				Comments
					Upper Canadian Breaks (70)	High Plains North (77A)	High Plains, Northwest (77B)	Southern High Plains (77C)	High Plains Southwest (77D)	High Plains, Southwest (77E)	Canadian River Breaks (77F)	Rolling Plains, West (78B)	Rolling Plains East (78C)	Coarse		Moderately Coarse	Medium	Moderately Fine	Fine	
PERENNIAL GRASSES																				
1/, 4/ (Continued)																				
Galletagrass		5.2	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1						Western Tier of Counties in Panhandle-South Plains
Grama: black	Nogal	1.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1						
Grama: blue	Hachita, Lovington	1.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X	
Grama: sideoats	El Reno, Haskell, Vaughn, Niner	4.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X	
Green sprangletop		1.7	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X		
Indiangrass: yellow	Cheyenne, Lometa	4.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X	Use only when adequate moisture conditions exist. Forage will be produced but seed may not be produced each year.
Johnsongrass		10.0	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X	Cover depth is 1/4 to 1/2 inches.
Kleingrass	Selection-75	1.5	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X	
Kleingrass	Verde	1.7	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X	
Lovegrass: lehman		1.5	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X			
Lovegrass: weeping	common, Ermelo	1.5	I	W	X	X	X	X	X	X	X	X	X	3/15 - 6/1	X	X	X			
Lovegrass: wilman	common, Palar	1.5	I	W								X	X	12/1 - 6/1	X	X	X	X	X	Southern Counties of Rolling Plains
Lovegrass: sand, sandhill	common, Mason	1.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X			
Orchardgrass		5.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15						Cover depth is 1/2 to 3/4 inches.
Panicum: blue		2.0	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X	
Ryegrass: perennial		4.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	
Sacaton: alkali, big	common, Salado, Saltalk	1.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1			X	X	X	Adapted to saline sites.
Sorghum alnum		12.0	I	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X	Cover depth is 1/4 to 1/2 inches.
Switchgrass	Alamo	2.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X	Forage will be produced, but seed may not be produced each year.
Switchgrass	Blackwell, Caddo, Kanlow, local harvest	3.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1						Forage will be produced, but seed may not be produced each year.
Texas bluegrass		0.8	N	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	
Texas wintergrass		15.0	N	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	
Vine-mesquite		6.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X	
Wheatgrass: tall	Jose, Largo	12.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X		sites, or sites that receives extra runoff. Cover depth is 1/4 to 1/2 inches.
Wheatgrass: pubescent		11.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15						Cover depth is 1/4 to 1/2 inches.

Appendix 1 - Planting rates for drill or broadcast seeding and sprigging in Texas, Zone 1

Name	Variety	Seeding rates are pounds pure live seed (PLS) per acre - 3/, 6/, 10/	Native (N) or Introduced (I)	Season of growth	Adaptation by Major Land Resource Areas										Seeding Guidance	Adapted Plants by Soil Groups 8/				Comments
					Upper Canadian Breaks (7C)	High Plains North (77A)	High Plains, Northwest (77B)	Southern High Plains (77C)	High Plains Southwest (77D)	High Plains, Southwest (77E)	Canadian River Breaks (77B)	Rolling Plains, West (78B)	Rolling Plains East (78C)	Maximum Seeding Dates 7/, 8/	Coarse	Moderately Coarse	Medium	Moderately Fine	Fine	
PERENNIAL GRASSES																				
1/, 4/ (Continued)																				
Wheatgrass: western	Arriba, Barton, common	7.0	N	W	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	Cover depth is 1/4 to 1/2 inches.
Wildrye: canada		10.0	N	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	Cover depth is 1/4 to 1/2 inches.
Wildrye: virginia		12.0	N	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15		X	X	X	X	Cover depth is 1/4 to 1/2 inches.

Appendix 1 - Planting rates for drill or broadcast seeding and sprigging in Texas, Zone 1

Name	Variety	Seeding rates are pounds pure live seed (PLS) per acre - 3/, 6/, 10/	Native (N) or Introduced (I)	Season of growth	Adaptation by Major Land Resource Areas										Seeding Guidance Maximum Seeding Dates 7/, 8/	Adapted Plants by Soil Groups 8/					Comments
					Upper Canadian Breaks (7C)	High Plains North (77A)	High Plains, Northwest (77B)	Southern High Plains (77C)	High Plains Southwest (77D)	High Plains, Southwest (77E)	Canadian River Breaks (77B)	Rolling Plains, West (78B)	Rolling Plains East (78C)	Coarse		Moderately Coarse	Medium	Moderately Fine	Fine		
PERENNIAL FORBS, LEGUMES, SHRUBS 1/, 4/																					
Alfalfa		20.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X	X	Pounds of commercial seed. Irrigated or Dryland Varieties on suited soils	
Alfalfa		4.5	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X		Commercial Seed - For CRP and Wildlife Plantings	
Awnless bushsunflower		2.6	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X				
Engelmann daisy		15.0	N	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15			X	X	X		
Fourwing saltbush		15.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X			
Gayfeather: dotted		10.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X		
Illinois bundleflower		13.6	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X		
Leadplant		4.5	N	W	X	X			X				X	12/1 - 6/1	X	X	X	X			
Littleleaf leadtree		7.0	N	W	X	X		X	X		X		X	12/1 - 6/1		X	X	X	X		
Maximilian sunflower		3.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1			X	X	X		
Orange zexmenia		3.4	N	W	X	X	X	X	X	X		X	X	12/1 - 6/1	X	X	X	X			
Prairieclover: purple		3.0	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1		X	X	X	X		
Prairieclover: white		2.0	N	W	X	X	X	X	X	X		X	X	12/1 - 6/1		X	X	X	X		
Sainfoin		38.0	N	W									X	12/1 - 6/1							
Sesbania: drummond		20.0	N	W						X	X	X	X	12/1 - 6/1			X	X	X		
Western ragweed		7.5	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X		

Appendix 1 - Planting rates for drill or broadcast seeding and sprigging in Texas, Zone 1																					
Name	Variety	Seeding rates are pounds pure live seed (PLS) per acre - 3/, 6/, 10/	Native (N) or Introduced (I)	Season of growth	Adaptation by Major Land Resource Areas								Seeding Guidance	Adapted Plants by Soil Groups 8/				Comments			
					Upper Canadian Breaks (7C)	High Plains North (77A)	High Plains, Northwest (77B)	Southern High Plains (77C)	High Plains Southwest (77D)	High Plains, Southwest (77E)	Canadian River Breaks (77B)	Rolling Plains, West (78B)		Rolling Plains East (78C)	Coarse	Moderately Coarse	Medium		Moderately Fine	Fine	
ANNUAL FORBS, LEGUMES, SHRUBS 1/, 4/																					
Clover: rose		5.2	I	C					X	X		X	X	9/1 - 11/15				X	X		
Clover: subterranean		16.0	I	C						X		X	X	9/1 - 11/15				X	X		
Clover: white		1.0	I	C						X	X	X	X	9/1 - 11/15				X	X		
Partridge pea		13.4	N	W	X	X	X	X	X	X	X	X	X	12/1 - 6/1	X	X	X	X	X		
Singletary pea		35.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15			X	X	X		
Sunflower	Native	5.0	N	W	X	X	X	X	X	X	X	X	X	4/1 - 7/1	X	X	X	X	X		
Sweetclover: annual		10.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X	X	Commercial Seed - Forage Production Rates	
Sweetclover: biennial		10.0	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X	X	Commercial Seed - Forage Production Rates	
Sweetclover: annual		3.8	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X	X	Commercial SeedCRP and Wildlife Plantings	
Sweetclover: biennial		3.8	I	C	X	X	X	X	X	X	X	X	X	9/1 - 11/15	X	X	X	X	X	Commercial Seed CRP and Wildlife Plantings	

FOOTNOTES:

1/ Species are listed by common name and where applicable by released cultivar or variety. Planting rates are shown either as by PLS or commercial rates.

2/ Conversion factors: 3.5 bushels of tops = 1 bale; 7 bushels of sprigs = 1 bale; 1.25 cubic feet = 1 bushel; 15 pounds = 1 bushel.

3/ PLS = Pure Live Seed. To compute PLS from seed analysis information: Percent PLS = (% germination + % hard [dormant] seed) X % purity. Seeding rate in PLS pounds divided by % PLS will give you the bulk seeding rate needed to get the right amount of pure live seed.

4/ Local harvest may be used when seeding species of unknown or common variety, or natural stands. Local harvested seed should have its geographic origin within 200 miles north, 300 miles south, 100 miles east and 200 miles west of the site where it will be planted. It is also desirable that locally harvested seed be used on soils of the same texture as soils where seed was harvested.

5/ The TZ (tetrazolium salt) test can be used for the germination factor in figuring PLS if the dealer furnishes the seed tag or other proof the test was run by a reputable seed lab.

6/ Drill planting is defined as rows spaced less than 20 inches apart. Row planting rates will be 1/3 of drill rates.

7/ Planting done outside of these dates must have prior approval from the appropriate zone specialist.

8/ The optimum planting depth for all species is 1/8 to 1/4 inch unless it is otherwise noted for the individual specie.

9/ Soil groups are based on the following textures: **Coarse** - Coarse sand, Sand, Fine sand, Very fine sand, Loamy coarse sand, Loamy sand, Loamy fine sand and Loamy very fine sand; **Moderately Coarse** - Sandy loam, Coarse sandy loam and fine sandy loam; **Medium** - Very fine sandy loam, Loam, Silt loam and silt; **Moderately Fine** - Clay loam, Sandy clay loam and Silty clay loam; **Fine** - Sandy clay, silty clay and clay.

10/ For Critical Areas, e.g. Grassed Waterways, Critical Area Planting, and other sites receiving increased water flow, traffic, or wind erosion, the seeding rate may be adjusted to up to twice the listed seeding rate. Consideration should be given by the Designated Conservationist as to the suitability of the plants to the application and site conditions.